



VHF AND UHF DIGITAL/ANALOG TRANSCEIVERS

IC-F3101D IC-F4101D

VHF transceiver

UHF transceiver

***Everything you expect in a business radio
... Plus Digital!***

IDAS™
ICOM DIGITAL ADVANCED SYSTEM

IDAS™ conventional & IDAS™ single-site trunking

Digital/Analog mixed mode operation

Built-in 2-Tone, 5-Tone, CTCSS and DTCS

MDC PTT ID & MDC emergency call

800mW (typ.) loud and intelligible audio

IP54 and MIL-STD-810 F rugged construction

Long lasting battery life

Channel announcement



IP54

**MDC 1200
Compatible**

Limited functions.

More than Just Smooth Digital Migration!

Non-slip, large PTT



The large PTT button is designed to provide non-slip, confident-click, even wearing gloves.

800mW loud audio



The large 45mm speaker delivers up to 800mW* of loud audio! Digital modulation adds distinct clarity to received voices.

* Typical with internal speaker.

Long lasting battery life

| Battery pack | Type and capacity | Operating time* (Approx.) |
|--------------|---|-----------------------------------|
| BP-265 | Li-Ion 7.4V 1900mAh (min.) 2000mAh (typ.) | 175 hours (VHF) 16 hours (UHF) |

* Tx: Rx: Standby=5:5:90. Power save function ON.

IDAS™ digital mode operation

The IC-F3101D series provides basic operation in NXDN™ CAI-based IDAS digital mode. It is also compatible with IDAS multi-site conventional and IDAS single-site trunking. The following IDAS features are programmable.

- PTT ID (TX) • Individual/Group call (TX)
- Block decode • RAN (Radio Access Number)
- Radio check (RX) • Stun/kill/revive (RX)
- Call alert (RX) • Remote monitor (RX)
- Emergency (TX) • Digital voice scrambler
- GPS (TX only with HM-171GP)

TX: Transmit, RX: Receive

Built-in 2-Tone and 5-Tone (Analog mode)

2-Tone and 5-Tone signalings give you selective calling, quiet stand-by and other convenient functions. The radio stun and kill functions disable a radio over the air and the revive function restores the stunned radio.

Scan features

The priority scan allows you to monitor one or two priority channels while scanning other non-priority channels. The transmit channel and talk back functions allow you to make a quick response while scanning.

Other features (* = analog only)

- CTCSS/DTCS encoder/decoder*
- MDC PTT ID and emergency*
- DTMF autodial
- Low battery alert
- 2-step power save
- PC programmable
- Time out timer
- Talk around function
- Lone worker function
- Surveillance function
- Forced narrow function*

VHF & UHF DIGITAL/ANALOG TRANSCEIVERS

IC-F3101D
IC-F4101D



The IC-F3101D: A multitude of advantages because it's IDAS™

Advantage 1

Individual/group call

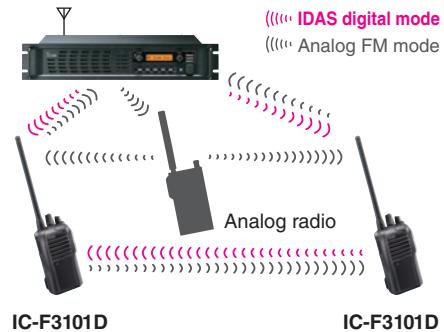
Analog/Digital



This is a simple and basic setting for those who use the radio mainly for individual and group call. Use the 16-position rotary channel knob to select the appropriate individual or group call. This setting also can be used with analog 2-tone or 5-tone signalling.

Advantage 2

Digital/analog mixed mode



The IC-F3101D series can receive both analog and digital mode signals on a single channel and automatically selects the received mode to reply to the received call, while the talk back timer remains. It's a smart way to grow into digital radio - at your own pace, as your budget and comfort allow.

Advantage 3

Perfect group communication tool, large or small

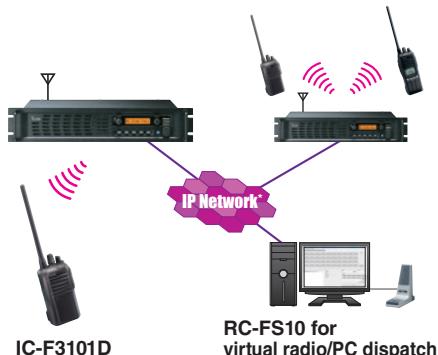
Analog/Digital



Mix the basic IC-F3101D series with the advanced IC-F3161D series for efficient group managed systems. Commands like radio stun, kill and revive as well as the caller ID of the IC-F3101D displayed on the administrator's radio provide efficient communication within the group.

Advantage 4

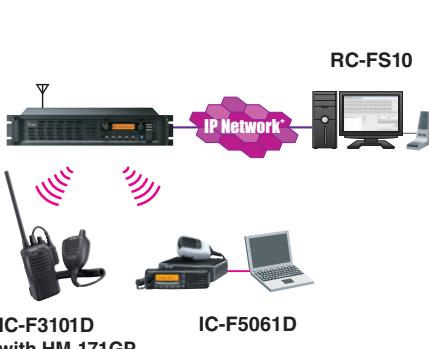
Multi-site conventional mode



When using the IC-F3101D series in IDAS multi-site conventional mode, the IC-F3101D can communicate with other IDAS radio users working with other repeater sites and/or virtual radio/PC dispatch stations on the IDAS network.

Advantage 5

GPS capability



When used with the optional GPS speaker-microphone, HM-171GP, GPS position data can be sent to other advanced IDAS radios (PC and software required) and/or virtual radio/PC dispatch stations.

Advantage 6

IDAS single-site trunking



The IC-F3101D series can be used in an IDAS single-site trunking system. The IDAS trunking system is a distributed system (similar to the analog LTR™ trunking) with no control channel, so more voice traffic channels are available for increased system capacity.

All advantages shown represent possible system configurations. Ask your Icom dealer to configure an IDAS system that works best for you.

*Note: Private IP Network or VPN Tunnels through the Internet with static endpoints.

SPECIFICATIONS

| | IC-F3101D | IC-F4101D |
|--|---|---|
| GENERAL | | |
| Frequency coverage | 136–174MHz | 400–470MHz 450–512MHz |
| Number of channels | 16 channels | |
| Type of emission | 16K0F3E, 11K0F3E, 4K00F1E/F1D | |
| Channel spacing | 6.25/15/30kHz, 6.25/12.5/25kHz | |
| PLL channel step | 2.5/3.125kHz | |
| Power supply requirement | 7.5V DC nominal | |
| Current drain (approx.) | | |
| Tx High | 1.3A | 1.3A |
| Rx Max. audio | 400mA (Internal SP) | 400mA (Internal SP) |
| Standby | 90mA (Digital mode) | 100mA (Digital mode) |
| Antenna impedance | 50Ω | |
| Operating temperature range | –30°C to +60°C ; –22°F to +140°F (Radio only) | |
| Dimensions (W×H×D) (Projections not included) | 58×111.5×36.5mm ; 2.28×4.39×1.44in (With BP-265) | |
| Weight (approx.) | 150g; 5.3oz (Radio only) 320g; 11.3oz (With MB-124, BP-265 & Ant.) | 150g; 5.3oz (Radio only) 310g; 10.9oz (With MB-124, BP-265 & Ant.) |
| TRANSMITTER | | |
| Output power (at 7.5V DC) | 5W, 2W, 1W (Hi, L2, L1) | 4W, 2W, 1W (Hi, L2, L1) |
| Max. frequency deviation | ±5.0kHz/±2.5kHz (Wide/Narrow) | |
| Frequency stability | ±1.0ppm | |
| Spurious emissions | 70dB min. | |
| FM Hum and noise | 52/46dB typ. (W/N) | 50/43dB typ. (W/N) |
| Audio harmonic distortion (AF 1kHz 40% deviation) | 0.5/0.8% typ. (W/N) | 0.7/1.2% typ. (W/N) |
| Ext. microphone connector | 3-conductor 2.5 (d) mm (1/10")/2.2kΩ | |
| RECEIVER | | |
| Sensitivity (at 12dB SINAD) (at 5% BER) | 0.23µV typ. 0.18µV typ. | 0.22µV typ. 0.18µV typ. |
| Adjacent channel selectivity | 77/71dB typ. (W/N) | 74/67dB typ. (W/N) |
| Spurious response rejection | 90dB typ. | 80dB typ. |
| Intermodulation rejection | 75dB typ. | |
| Hum and noise | 48/42dB typ. (W/N) | 46/40dB typ. (W/N) |
| Audio output power (at 5% distortion) | | |
| Internal SP (With 12Ω load) | 800mW typ. | |
| External SP (With 8Ω load) | 400mW typ. | |
| Ext. speaker connector | 2-conductor 3.5 (d) mm (1/8")/8Ω | |

Measurements made in accordance with TIA-603.

All stated specifications are subject to change without notice or obligation.

Applicable U.S. Military Specifications & IP Rating

| Standard | MIL 810F | |
|---|--|-----------|
| | Method | Procedure |
| Low Pressure | 500.4 | I, II |
| High Temperature | 501.4 | I, II |
| Low Temperature | 502.4 | I, II |
| Temperature Shock | 503.4 | I |
| Solar Radiation | 505.4 | I |
| Rain Blowing/Drip | 506.4 | I, III |
| Humidity | 507.4 | – |
| Salt Fog | 509.4 | – |
| Dust Blowing | 510.4 | I |
| Vibration | 514.5 | I |
| Shock | 516.5 | I, IV |
| Also meets equivalent MIL-STD-810-C, -D and -E. | | |
| Ingress Protection Standard | | |
| Dust & Water | IP54 (Dust-protection and water resistant) | |

Icom, Icom Inc. and the Icom logo are registered trademarks of Icom Incorporated (Japan) in the United States, the United Kingdom, Germany, France, Spain, Russia, Japan and/or other countries. NXDN is a trademark of Icom Incorporated and Kenwood Corporation. IDAS and IDAS logo are trademarks of Icom Incorporated. LTR is a trademark of the EF Johnson Technologies, Inc. All other trademarks are the properties of their respective holders.

Icom Inc.

1-1-32, Kami-minami, Hirano-ku, Osaka 547-0003, Japan

Phone: +81 (06) 6793 5302

Fax: +81 (06) 6793 0013

www.icom.co.jp/world

Count on us!

Icom America Inc.

2380 116th Avenue NE,
Bellevue, WA 98004, U.S.A.
Phone: +1 (425) 454-8155
Fax: +1 (425) 454-1509
E-mail: sales@icomamerica.com
URL: <http://www.icomamerica.com>

Icom Canada

Glenwood Center #150-6165 Highway 17,
Delta, B.C., V4K 5B8, Canada
Phone: +1 (604) 552-4266
Fax: +1 (604) 952-0090
E-mail: info@icomcanada.com
URL: <http://www.icomcanada.com>

Icom (Australia) Pty. Ltd.

Unit 1 / 103 Garden Road,
Clayton, VIC 3168 Australia
Phone: +61 (03) 9549 7500
Fax: +61 (03) 9549 7505
E-mail: sales@icom.net.au
URL: <http://www.icom.net.au>

Icom New Zealand

146A Harris Road, East Tamaki,
Auckland, New Zealand
Phone: +64 (09) 274 4062
Fax: +64 (09) 274 4708
E-mail: inquiries@icom.co.nz
URL: <http://www.icom.co.nz>

Icom (Europe) GmbH

Communication Equipment
Auf der Krautweide 24
65812 Bad Soden am Taunus, Germany
Phone: +49 (6196) 76685-0
Fax: +49 (6196) 76685-50
E-mail: info@icom-europe.com
URL: <http://www.icom-europe.com>

Icom Spain S.L.

Ctra. Rubí, No. 88 "Edificio Can Castanyer"
Bajos A 08174, Sant Cugat del Vallès,
Barcelona, Spain
Phone: +34 (93) 590 26 70
Fax: +34 (93) 589 04 46
E-mail: icom@icomspain.com
URL: <http://www.icomspain.com>

Icom (UK) Ltd.

Blacksole House, Altria Park,
Herne Bay, Kent, CT6 6GZ, U.K.
Phone: +44 (01227) 741741
Fax: +44 (01227) 741742
E-mail: info@icomuk.co.uk
URL: <http://www.icomuk.co.uk>

Icom France s.a.s.

Zac de la Plaine,
1 Rue Brindepont des Moulinais, BP 45804,
31505 Toulouse Cedex 5, France
Phone: +33 (5) 61 36 03 03
Fax: +33 (5) 61 36 03 00
E-mail: icom@icom-france.com
URL: <http://www.icom-france.com>

Icom Polska

81-850 Sopot, ul. 3 Maja 54, Poland
Phone: +48 (58) 551 7135
Fax: +48 (58) 551 0484
E-mail: icompolksa@icompolksa.com.pl
URL: <http://www.icompolksa.com.pl>

Asia Icom Inc.

6F No. 68, Sec. 1 Cheng-Teh Road,
Taipei, Taiwan, R.O.C.
Phone: +886 (02) 2559 1899
Fax: +886 (02) 2559 1874
E-mail: sales@asia-icom.com
URL: <http://www.asia-icom.com>

Beijing Icom Ltd.

10C07, Long Silver Mansion, No.88, Yong Ding
Road, Haidian District, Beijing, 100039, China
Phone: +86 (010) 5889 5391/5392/5393
Fax: +86 (010) 5889 5395
E-mail: bjicom@bjicom.com
URL: <http://www.bjicom.com>

OPTIONS Some options may not be available in some countries. Please ask your dealer for details.

Battery pack& case



BP-263
Battery case
6 x AA (LR6)



BP-265
2000mAh (typ.)
Li-Ion battery
1900mAh (min.)

Rapid chargers



BC-193
for BP-265
Li-Ion battery
BC-123S+1
for use with BC-193

6 unit multi-charger for BP-265



*1 BC-123SA for 120V AC.
SE for 230V AC.
SV for 240V AC.

Cigarette lighter cable & power supply cables



CP-23L
For use with
BC-193

OPC-515L
For use with
BC-192 or BC-193

OPC-656
For use with
BC-197

Speaker-microphones



HM-171GP
GPS Microphone
HM-158L
HM-159L

Headsets & plug adapter cable



HS-94
Earhook type

HS-95
Behind-the-head
type

HS-97
Throat type

OPC-2004
Required when
using any of
these headsets

HIGH GAIN ANTENNAS

• FA-SC62V : 150–160MHz

• FA-SC63V : 155–165MHz

• FA-SC57VS : 160–174MHz

• FA-SC73US : 450–490MHz

STANDARD ANTENNAS

• FA-SC25V : 136–150MHz

• FA-SC55V : 150–174MHz

• FA-SC25U : 400–430MHz

• FA-SC57U : 430–470MHz

• FA-SC72U : 470–520MHz

CUT ANTENNAS

• FA-SC61VC : 136–174MHz

• FA-SC61UC : 380–520MHz

CHARGER ADAPTERS

• AD-120 for BP-264

• AD-121 for BP-265

Either AD-120 or AD-121
charger adapters are supplied
with the BC-197's version.

BELT CLIP

• MB-124 Alligator type

Same as supplied.

Your local distributor/dealer: